

Tennessee State Board of Education



Mr. Hubert L. McCullough, Chairman
Dr. Douglas E. Wood, Executive
Director

Early Childhood Education

Is

Indispensable for Scholarship

BRAIN RESEARCH

Children must master a large number of skills necessary to be “ready” for school.

These skills are learned through appropriate experiences designed to stimulate the brain and help build its capacity to learn.

From age 3 to 6, the brain grows from 75% to 90% of its adult size.

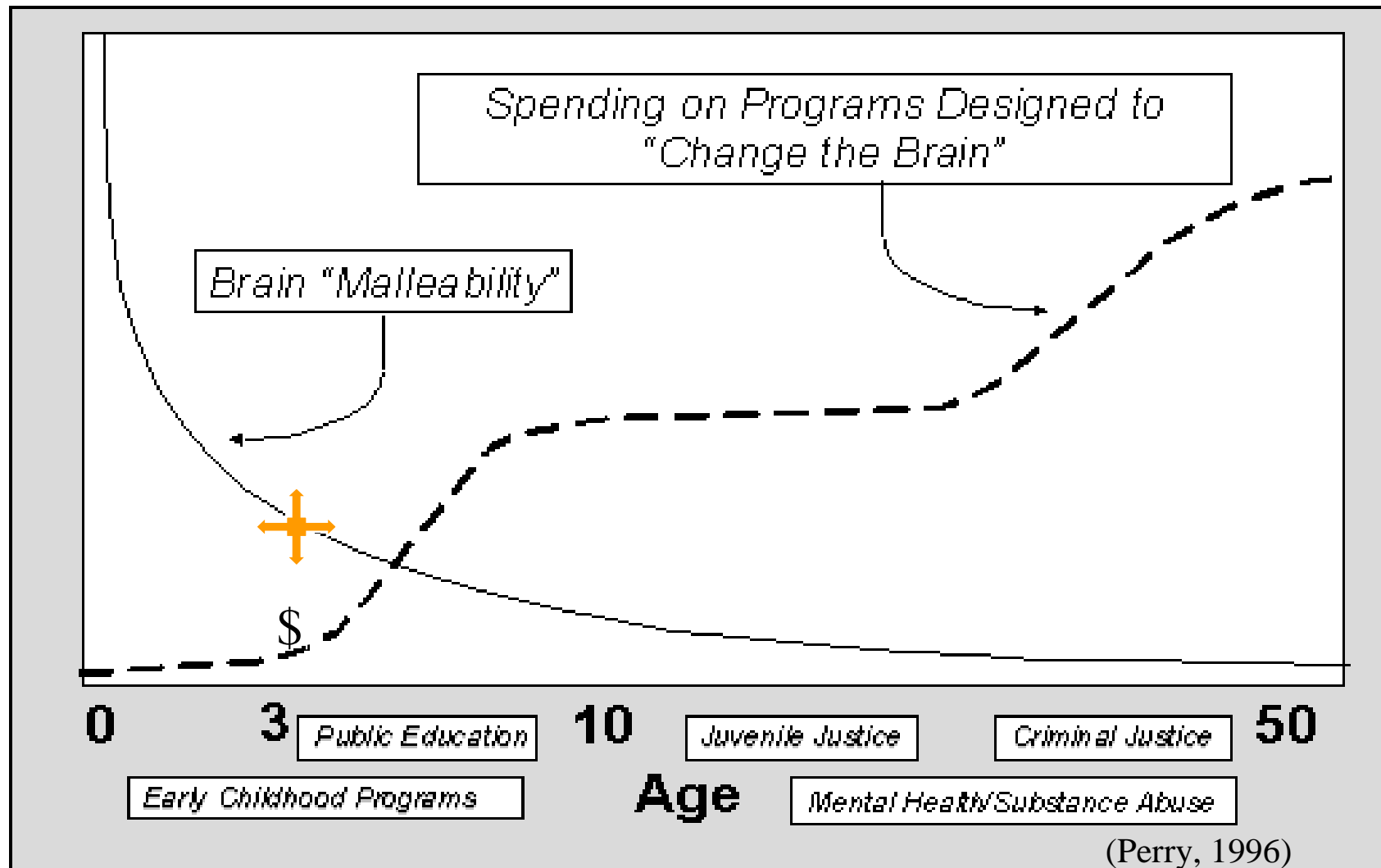
The quality, quantity, and consistency of stimulation will determine the number of brain synapses that are formed and how those connections will function.

(Schiller, 1997)

There are prime times for acquiring different knowledge and skills.

Early experiences have a direct affect on the way the brain is wired.

Research confirms that the at-risk child is more likely to miss those quality experiences that promote brain development.



The least amount of funding is invested at a time when the brain is most receptive to input and growth.

Many four year olds do not have the early learning and language experiences that children from sufficient socioeconomic environments are bringing with them to school.

Hart and Risley (1995) identified the differences in quantity and quality of words heard in homes of three different socioeconomic levels.

Actual Differences in Quantity of Words Heard

In a typical hour, the average child would hear:

Welfare:	616 words
Working Class:	1,251 words
Professional:	2,153 words

Actual Differences in Quality of Words Heard

Welfare	5 affirmations, 11 prohibitions
Working Class:	12 affirmations, 7 prohibitions
Professional:	32 affirmations, 5 prohibitions

In Tennessee it is estimated that 38,000 four year old children are at risk of school failure because of low family income.

Approximately 20,000 of these four year olds are without access to quality language, literacy, physical and social early learning experiences essential to succeed in school and beyond.

Without a quality preschool experience, children from low income backgrounds face a bleak future.

Based on the High/Scope Perry Study, a group of twenty low income children experience the following outcomes as they mature:

11 children will repeat one or more grades.

9 children will be identified in need of special education with an IQ of ≤ 85 .

7 children will be destined to commit 5 or more crimes and require incarceration.

16 children will not have the skills necessary for post secondary education.

11 children will not graduate from high school.

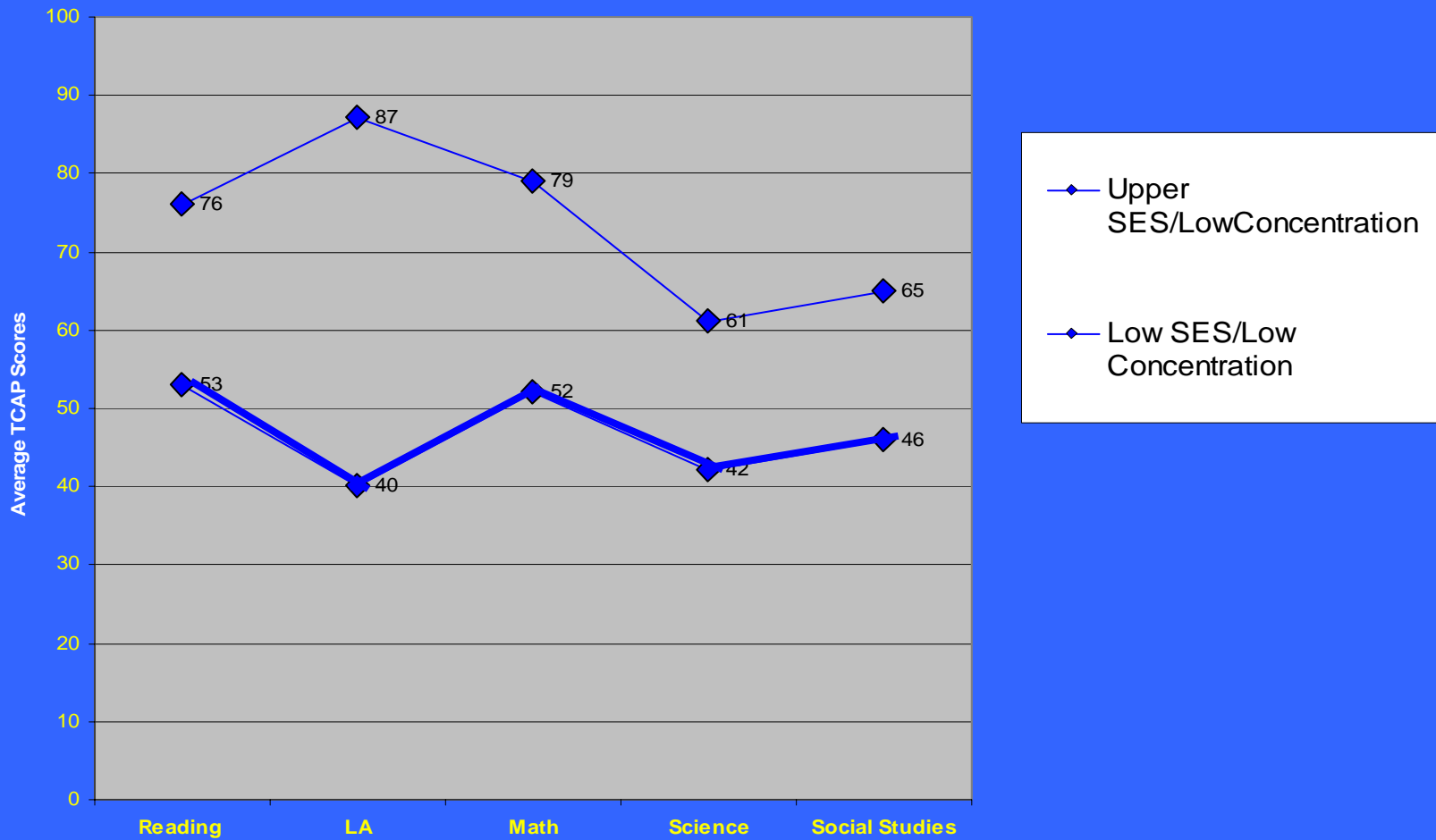
Low Socioeconomic Status (SES) has more impact on cognition scores than any of the other factors, such as race, ethnicity, home reading, family educational expectations, etc.

(Economic Policy Institute, 2002)

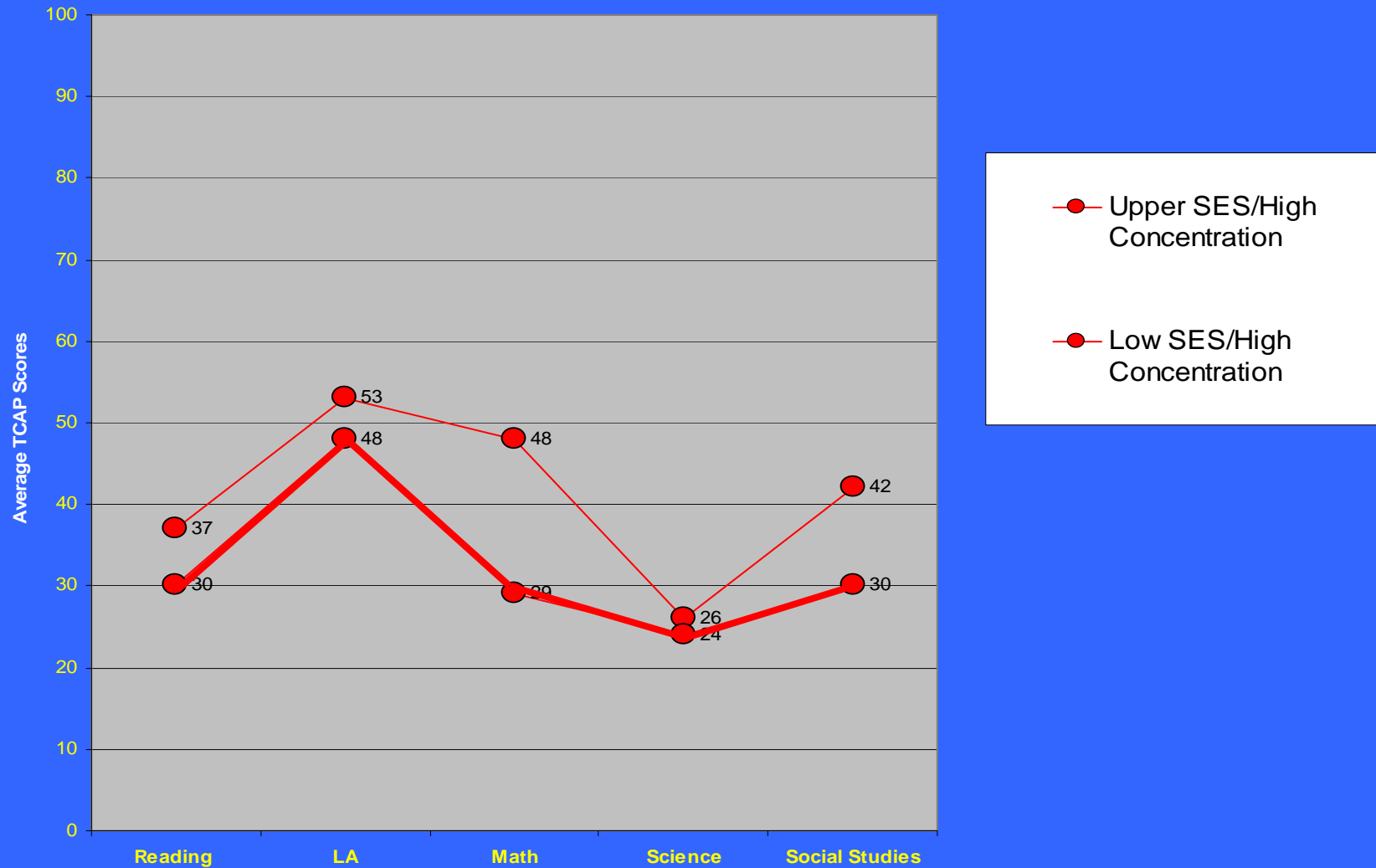
Poverty's impact is reflected in the achievement test scores of Tennessee's elementary students .

Information about each school and system can be found at the Tennessee Department of Education Web site www.state.tn.us/education. Click on the Report Card 2002 icon to access the information.

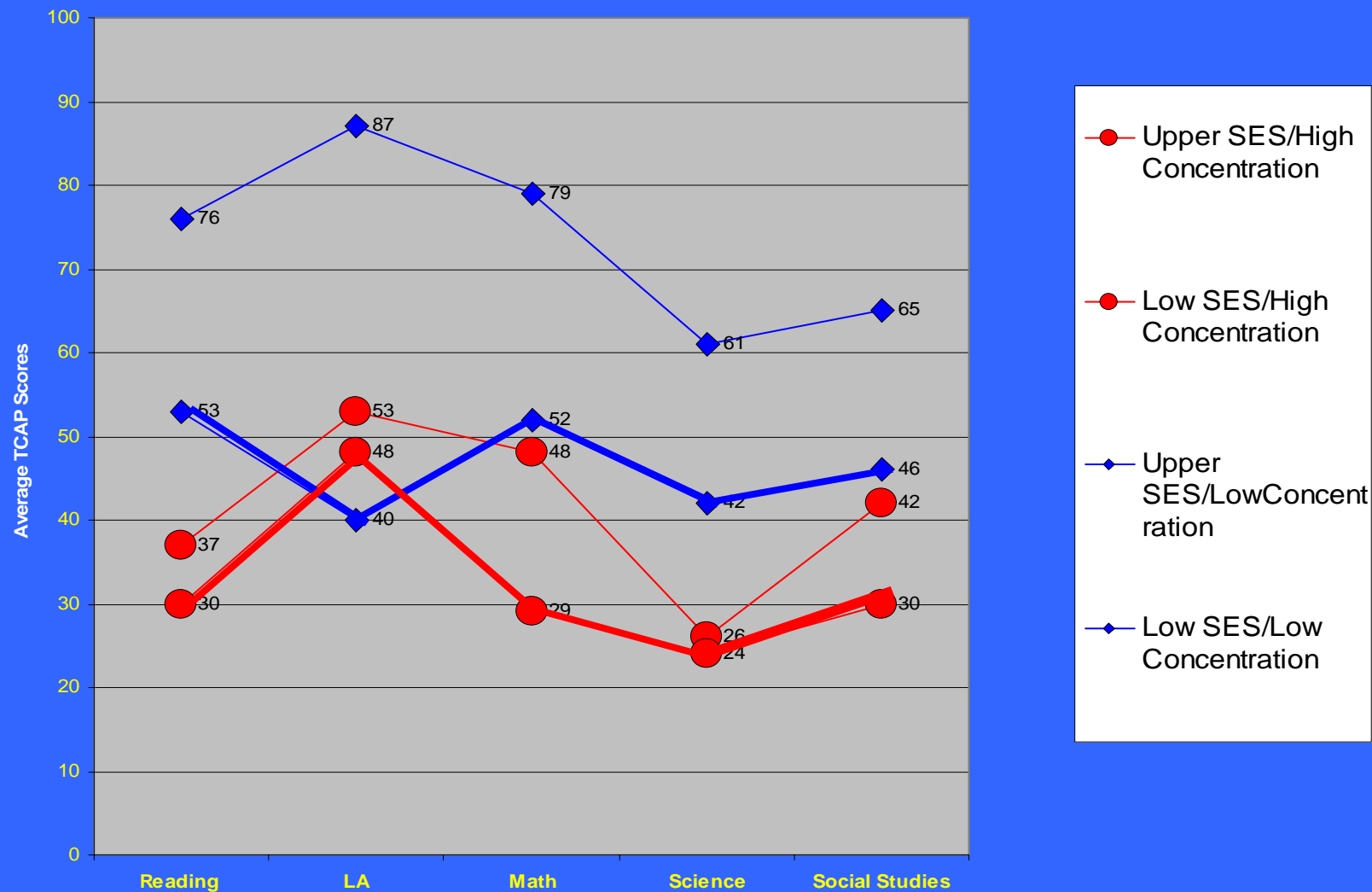
Comparison of Socioeconomic Status (SES) Students' Achievement in Low Concentration of Poverty Schools



Comparison of Socioeconomic Status (SES) Students' Achievement in High Concentration of Poverty Schools



Comparison of Socioeconomic Status (SES) Students' Achievement in High and Low Concentration of Poverty Schools



Children identified with low socioeconomic status, whether attending a school with high or low concentrations of poverty simply start out behind and stay behind.

Quality early childhood education can alter these negative outcomes.

In 1995, the State Board of Education adopted the Tennessee Early Childhood Education Plan. This plan includes three position papers that outline:

- Principles of High Quality Programs
- Guidelines for Local Programs
- and
- Policy for Local School Systems

Tennessee's Plan for early childhood education programs insures quality by requiring:

- a licensed teacher, endorsed in early childhood education.
- a teacher assistant who holds a Child Development Associate (CDA) certificate or higher.

Tennessee's Plan (Continued)

- A maximum class size of 20 four-year-old students.
- A low adult:child ratio of 1:10 for 4 year olds and 1:8 for 3 year olds.
- An educational program that is designed to enhance growth in all areas; cognition, language development, social-emotional development, and motor development.

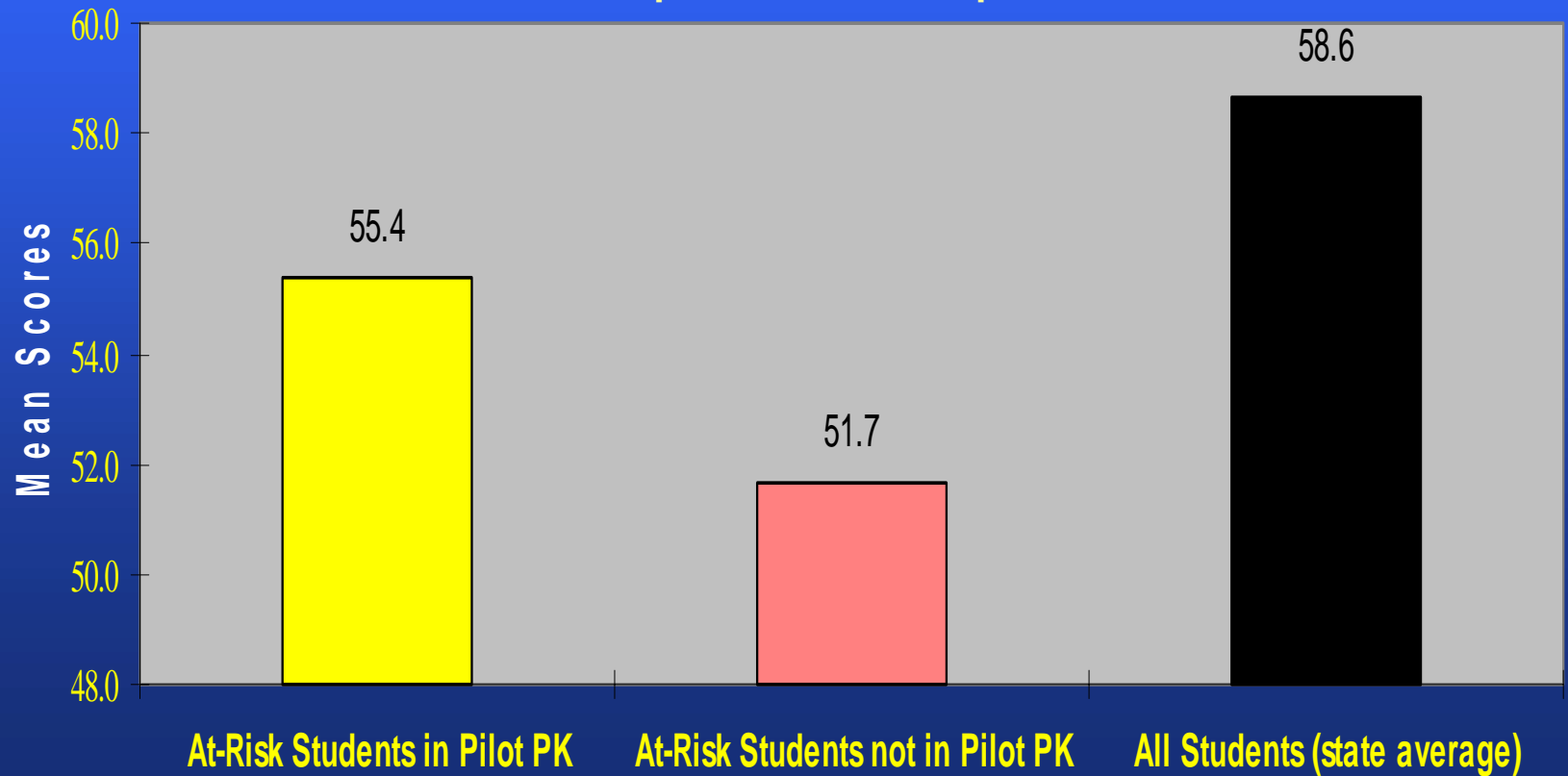
In 1996, the 99th General Assembly adopted legislation for creation of the Tennessee Early Childhood Education Pilot Program based on this Plan.

In 1998, Tennessee's first students to participate in the Tennessee Early Childhood Education Pilot Program had only a partial year of prekindergarten yet scored significantly higher than their socioeconomic peers who had no quality pre-kindergarten experience.

Comparison of Total Battery Scores on Second Grade Achievement Test

(SY 2001-02)

[Cohort I-'98-'99 Students]



At-risk students who
participated in a full year
of preschool:

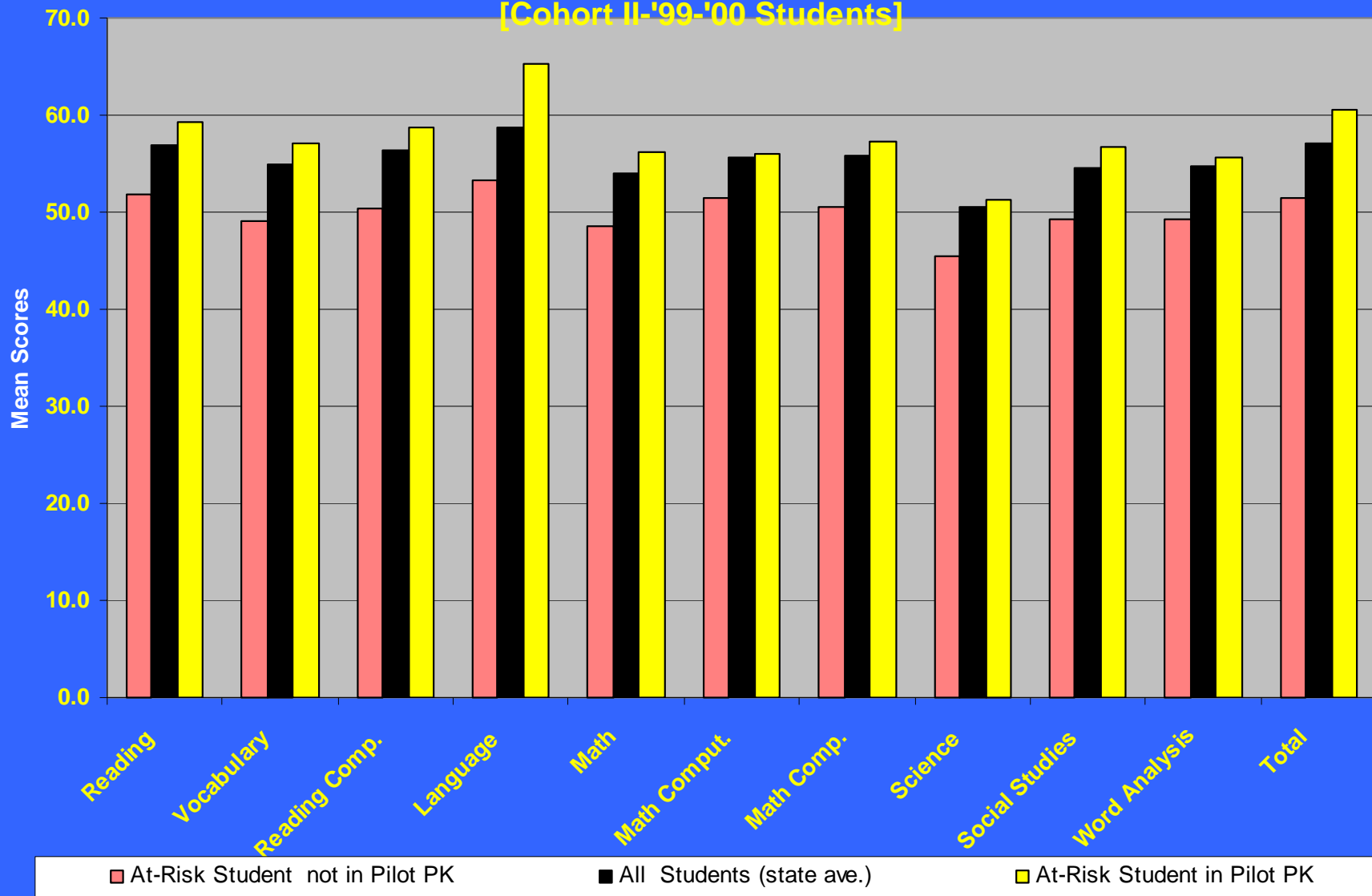
scored significantly higher
than their socioeconomic
peers without preschool

and

scored higher than the state
average for all students.

Comparison of All Areas of the First Grade Achievement Test (SY 2001-02)

[Cohort II-'99-'00 Students]



Future Impact of Tennessee's Early Childhood Education “Pilot” Program

Results are based on the following longitudinal research studies:

Abecedarian

Chicago Child Parent

Perry High/Scope

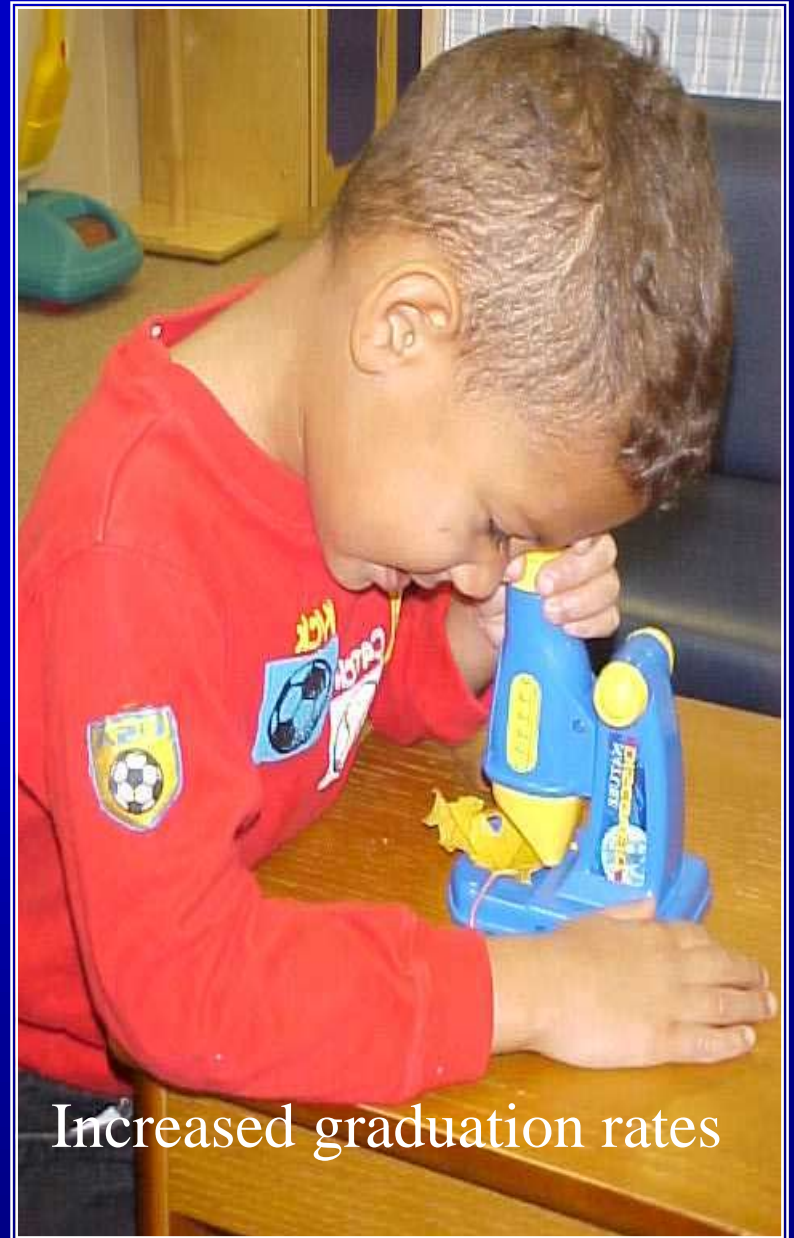
Increased IQ



Reduced
referrals to
special
education



Decreased grade repetition



Increased graduation rates



Increased scores on
standardized tests





Increased completion of
higher education



Improvement in
educational and
socioeconomic status of
the mother



Decreased out-of-
wedlock births





Increased economic well
being in adulthood

Decreased welfare
dependency





Quality Early
Childhood
Education is an
investment in
Tennessee's
future.

The arc of the Universe is long...
but it bends toward justice

Martin Luther King, Jr



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